

# Synopses

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## Macrodontic Incisors Aetiology, Clinical features and Management

Nymphia Malhotra, BDS (Otago)

2nd Year Post-Graduate Student, The University Of Melbourne

Doctor of Clinical Dentistry (Paediatric Dentistry)

Honorary Dental Officer, Royal Children's Hospital, Melbourne

### Introduction

Macrodonia is a dental anomaly in which any tooth or teeth are bigger than normal for their respective tooth type.<sup>1</sup> Macrodonia of anterior teeth may occur as an isolated condition or as a result of fusion or gemination and can occur in the primary or permanent dentition.<sup>2,3</sup> Fusion is defined as the joining of two teeth by pulp and dentine with the presence of two canals.<sup>2</sup> Gemination is defined as the attempt by a single tooth germ to undergo division to form two teeth.<sup>2</sup>

Macrodonia may sometimes be found in primary teeth in Down syndrome and may be present in other syndromes such as Langer Giedion syndrome, KBG syndrome and hemihypertrophy.<sup>2</sup> In addition, macrodonia as a result of fusion or gemination is seen more frequently in patients with cleft lip and/or palate and those affected by certain congenital cerebral disorders.<sup>2</sup>

### Prevalence

True macrodonia that involves the entire dentition is extremely rare.<sup>1</sup> The prevalence of macrodonia, as a result of fusion or gemination in the primary dentition, ranges from 0.5% – 2.5% and in the permanent dentition the prevalence is about 0.2%.<sup>2-6</sup> If there is presence of fusion or gemination in the primary dentition, there is an increased likelihood of oligodontia in the secondary dentition.<sup>1</sup>

### Aetiology

The aetiology for single tooth macrodonia is unknown, but generalised macrodonia may result due to hormonal imbalance, as in pituitary gigantism.<sup>1</sup> Maternal use of thalidomide and alcohol or hypervitaminosis A in the pregnant mother have also been implicated as causative factors.<sup>7,8</sup> Macrodonia as a result of fusion or gemination can be hereditary, caused by disease or trauma and due to any factor that is operating early in dental development at the cellular differentiation and proliferation stages.<sup>2,4</sup> Dichotomy of the tooth germ is the most common theory to explain the process of gemination or fusion causing macrodonia.<sup>4</sup> The tooth bud splits into two, resulting in two teeth of equal or differently sized parts that may become fused or form one large abnormal tooth.

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## President's Report

A Rose by any other name...

*"It can no longer be considered acceptable to carry out poor quality dental treatment that fails because the patient 'was uncooperative'. Such a post hoc analysis simply reflects an incorrect or inadequate preoperative diagnosis of the patient's needs."*

Both sedation and general anaesthesia have legitimate but differing roles to play in the delivery of dental services. This is especially so in paediatric dentistry, where for a variety of reasons, children and adolescents may not have the coping skills required for them to accept the dental treatment they need, in the 'normal' dental environment.

The 'normal' dental environment is one in which conscious patients have delicate surgical procedures carried out in barely accessible parts of the mouth with strategic injections of local anaesthetic drugs to obtund the associated pain. Steve Martin, playing a dentist in the 'The Little Shop of Horrors', typifies the extreme position here when he sings, "Sit down, open wide, here I come!".

The fact that we are successful at all as a profession, is a tribute to our ability shape our patient's behaviours and teach them coping skills which modulate the emotional component of pain, while pharmacologically blocking the physical component of pain. We understand that pain is a two-headed creature and from our undergraduate days, we develop and refine the art of weaving together our behaviour management strategies and our dental treatment procedures, until the two are so tightly integrated that we sometimes forget that there were ever two strands.

The dental profession's paradigm of simultaneously managing dental issues and behavioural issues is

powerful, but unfortunately there can sometimes be a bit of collateral damage! This is evidenced by the number of adult dental phobics who can clearly recount their 'bad experiences' at the dentist, usually dating from their childhood. The fact that these episodes can be so clearly recounted, often after decades have elapsed, is a reflection of their psychological and emotional weight on that individual.

We have a professional responsibility to prevent the development of these phobias, either by preventing oral disease in the first place, or by making our treatment as atraumatic as possible. Where it is not possible to achieve this outcome by purely behavioural means, we can select from the range of pharmacological approaches available. It can no longer be considered acceptable to carry out poor quality dental treatment that fails because the patient 'was uncooperative'. Such a *post hoc* analysis simply reflects an incorrect or inadequate preoperative diagnosis of the patient's needs.

Sedation provides us with a safe and effective way to assist a conscious patient to cope with treatment by providing a balance of anxiolysis, dissociation, analgesia, and amnesia. With our support, both pharmacological and non pharmacological, the sedated patient is a participant in their treatment.

General anaesthesia on the other hand gives us the ability to completely change our paradigm of treatment by

uncoupling the management of dental issues from the management of behavioural issues. General anaesthesia gives our patients the opportunity for a fresh start, with the ravages of existing disease brought under control. It is not a behaviour management strategy as such, but rather general anaesthesia sidesteps the issues of behaviour management, allowing us to defer them.

Sedation and general anaesthesia have distinct objectives and indications. One is not a substitute for the other. It is our responsibility to choose the modality that will best meet the needs of our patients, being cognisant that both sedation and general anaesthesia involve inherent risks.

That our region is the safest in the world in which to have a general anaesthetic is certainly due to the ongoing efforts of ANZCA which has developed comprehensive guidelines for clinical practice<sup>1</sup>. In many jurisdictions, portions of the ANZCA guidelines have been given legislative force, and anaesthetics must be given in a registered hospital. This has shifted anaesthetics out of dental surgeries and into hospitals, placing rapidly increasing demands on the available facilities, and suddenly highlighted historical flaws in the system for remunerating hospital facilities.

Unlike other surgical procedures, dentistry is not 'banded', producing the absurd situation that a four-hour conservative dental procedure attracts the same procedure code, and hence the same rebate, as a thirty-minute conservative dental procedure. Needless to say, our Health Funds are quite happy for this situation to persist.

Very few of the private hospitals offering admission for dental procedures appear to have been able to negotiate sensible time based, rather than procedure based contracts with

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The phenomenon of gemination, in particular, may be explained in a similar manner whereby the tooth bud fails to undergo complete division (i.e. incomplete dichotomy) and thus has a single root canal.<sup>9</sup>

## Classification

The classification of macrodontia as a result of fusion or gemination is as follows.<sup>2</sup> The diagram below depicts the origin of twinned, geminated and fused teeth.

When one tooth germ divides equally creating two separate teeth with their respective pulp systems the process is defined as twinning. Twinned teeth are often mirror images of each other. In the case where the tooth germ begins to divide initially but fails to undergo complete division, the process is termed as gemination. Geminated teeth most often have a single pulp and some authors have questioned this stage as being an early stage in the process of 'twinning'.<sup>2,8</sup> Fusion on the other hand, occurs as a result of complete or incomplete dentine and/or pulp union and fused teeth vary in manifestation from a small area of dentinal fusion to complete pulpal union. The process of concrescence can be explained as the union of two teeth by cementum only.

## Clinical Features

In the anterior region, the anomalous incisors manifest as structures resembling two teeth that have been joined together with a groove on at least the buccal surface and less commonly on the lingual surface and a notch on the incisal edge.<sup>1</sup>

When macrodontic incisors form as a result of fusion, other than in the case of fusion with a supernumerary tooth, there is one less tooth in the dental arch.<sup>2</sup> This is seen more commonly in the mandible in the primary dentition and most frequently involves the canine and the lateral incisor or both the incisors.<sup>2</sup> Where fusion involves the lateral incisor and the canine, more frequently than not, the permanent lateral incisor is found to be absent in 50-75% of cases.<sup>2</sup> Macrodontic teeth that have undergone gemination may present similarly, with the groove and the notch, and the tooth being wider than normal. However, in comparison to the process of fusion, a normal number of teeth are present in the arch.

In addition, the geminated tooth may undergo complete gemination and instead manifest itself as two teeth after undergoing a process called 'twinning'. When twinning occurs, there will be one more (supernumerary) tooth in the arch, and the two teeth are likely to be mirror images.<sup>2,7,8</sup>

## Diagnosis

Macrodontia of anterior teeth, caused by fusion or gemination, may be associated with other dental anomalies, such as dens-in-dente, hypodontia, and supernumerary teeth, and non-dental anomalies, such as syndactyly and nail disorders.<sup>7</sup>

Simply counting the teeth (with the anomaly counted as a single unit) has been suggested to aid in the diagnosis and enable the clinician to differentiate between macrodontic teeth that have undergone fusion and gemination.<sup>4,7,8,10</sup> As mentioned earlier, a full complement of teeth indicates gemination, whereas a fewer than expected teeth is suggestive of fusion. The wide variations seen in the presentation of these complete / incomplete malformations however, not always, lend themselves to this simple 'counting rule'.<sup>4</sup> There have been several case reports of fusion and gemination occurring concurrently, that serve as examples of this diagnostic dilemma.<sup>4,8,11-13</sup> In some circumstances, clinical, radiographic and histological investigations are required to differentiate between macrodonts formed as a result of these developmental dental anomalies.<sup>6</sup> As per the classification mentioned above, radiographic examination coupled with a thorough clinical examination is of great help in distinguishing between fusion and gemination.<sup>4</sup>

## Treatment considerations

Fused or geminated macrodontic incisors in the primary dentition do not cause major problems unless followed by similar anomalies in the permanent dentition.<sup>2</sup> Caries of the median fissure or groove present where coronal fusion has occurred is very common and should be prevented by fissure sealing the tooth soon after its eruption.<sup>2</sup>

Clinical management of fused or geminated macrodontic incisors in the permanent dentition creates problems of crowding, aesthetics, and plaque accumulation because of surface

notching and irregularities and may often require a collaborative multi-disciplinary treatment approach.<sup>4</sup> Optimal management of macrodontic incisors depends on the cause of formation (i.e. fusion or gemination) and radiographic evaluation of the dental pulp. Several treatment options are available to manage macrodontic incisors in the permanent dentition.<sup>2</sup> Restorative 'camouflage' through selective anatomical reshaping (with composite resin addition or crown provision) may provide a pleasing aesthetic result.<sup>3,4,8</sup> Crown division or hemisectioning has also been previously attempted, but this may involve the pulp and require subsequent endodontic treatment.<sup>7</sup> Two cases that involved surgical resection of the fused crown forms with sharp osteotomes have been reported.<sup>13</sup> The surgery exposed pulp chambers that were left untreated and covered only by the mucogingival flap.<sup>13</sup> A 12-month and 4-year follow-up of both cases, post-endodontic and post-orthodontic treatment, revealed successful healing and preserved vitality of the pulps.<sup>13</sup>

In addition, restorative treatment may be difficult due to significant anatomical variations. Buccal and palatal grooves may continue down the entire length of the root surface and may lead to periodontal complications.<sup>4,13</sup> Surgical removal with prosthetic replacement may then have to be considered. This option needs careful planning to limit bone loss, which may compromise future treatment options and overall aesthetics.<sup>4,10</sup> If the number of incisors present exceeds the total normal number of incisors in the pre-maxillary area, then treatment options include extracting the macrodontic teeth and closing the space created with orthodontic movement of the supernumerary central or lateral incisor. The extracted macrodontic incisor may also be replaced by autogenous transplantation of the supernumerary incisor (if it has better morphology and aesthetics).<sup>14</sup> A case has been described of a unilateral macrodontic incisor as a result of gemination while the contra-lateral side exhibited two slightly smaller central incisors thought to have undergone twinning (or complete gemination).<sup>10</sup> The macrodontic tooth was extracted and one of the twinned supernumerary central incisors was orthodontically moved through the

midpalatal suture to achieve a more aesthetic and functional result.<sup>4</sup>

## Clinical Case Report

An 11.3 year-old-boy was referred to the Paediatric Dentistry department of the Royal Dental Hospital of Melbourne (RDHM) by his local community dental health centre for the management of a maxillary 'supernumerary tooth'. The patient presented with his mother and requested examination of his 'tombstone tooth'. The family history was non-contributory.

The patient's medical history revealed an uneventful pregnancy and full-term, spontaneous delivery with no immediate antenatal and perinatal problems. At 11 weeks of age, after suffering from bronchitis for 5 days, he was hospitalised with a diagnosis of bacterial meningitis after conclusive test results of lumbar puncture. He underwent neurosurgery (twice) to drain brain abscesses and remained hospitalised for a period of 6 weeks after which he had periodic reviews for 5 years. His current relevant medical history of eczema and asthma, diagnosed at 2 years, was managed by topical cortisone and Ventolin<sup>®</sup> respectively. His immunisations were up to date.

His developmental history revealed achievement of developmental milestones at the expected times. His weight was 55.9 kilograms and height was 150.5 centimetres.

Recent dental history included an examination at the School Dental Service prior to which he had been seen by a general dental practitioner. Previous dental treatment involved placement of fissure sealants on the first permanent molars at the age of seven years and a fissure sealant on the 'supernumerary incisor' at the age of 8 years. Head and neck examination revealed eczema on skin under the chin area and very dry lips with cracks noted at the commissures. Examination of the hands and nails revealed eczema around the cubital fossa region and nail biting. Intra-orally, the patient had enlarged tonsils and a history of fever and bronchitis one week prior to presentation. There was generalised inflammation of the gingivae.

The occlusal examination revealed he had a convex facial profile with a high maxillary lip line, competent lips and

was an occasional mouth breather. He had a retrognathic skeletal profile with the permanent incisors in Class II division II relationship, right side permanent molars in Angle Class I and left side permanent molars in Angle Class II relationship. Teeth 22 and 32 were in cross bite. The overbite was 5-6 millimetres, overjet was 3 millimetres with a brachyfacial skeletal relationship. The maxillary midline was coincident with facial midline and the mandibular midline was deviated to the left side by 4 millimetres. There was severe deficiency in the maxillary arch space and slight arch space deficiency in the mandible.

He lived in an area with fluoridated community water and used fluoride toothpaste (1000 ppm fluoride). Topical fluoride had been professionally applied. He was in his late mixed dentition with the following teeth present (*Figures 1-5*): 16, 55, 54, 12, Macrodont 11, 21, supernumerary / supplemental 21, 22, 63, 64, 65, 26, 36, 75, 34, partially erupted 33, 32, 31, 41, 42, 43, 44, partially erupted 45, 46 and unerupted permanent teeth were noted as present on the Orthopantomogram (*Figure 6*). Satisfactory fissure sealants were present on teeth 16, 26, 36 and 46 and teeth 64 and 54 showed proximal surface caries.

The macrodontic central incisor measured 12 millimetres in mesiodistal width, as measured mid-coronally, with a satisfactory fissure sealant on the median vertical groove. Periapical radiographs of the anterior teeth (*Figures 7, 8*) showed a single root associated with the macrodontic central incisor and a vertical median groove. The diagnosis was a Macrodontic geminated incisor (tooth 11) that had undergone incomplete gemination and showed the presence of a single undivided root.

The treatment plan consisted of oral hygiene advice and after consultation with the orthodontist who advised to take a lateral cephalogram (*Figure 9*), a plan was devised to extract the macrodont incisor (*Figure 10, 11*) in preparation for orthodontic treatment. The palatal grooves on teeth 12 and 22 were planned to be fissure sealed. The summary of problems included management of oral hygiene practices and patient anxiety towards dental treatment and orthodontic referral for the treatment planning of the macrodontic incisor. The long-term treatment plan consisted of monitoring

dental development, watching for demineralised areas or root resorptions and maintaining an excellent standard of oral hygiene during orthodontic treatment.

## Case Discussion

In the above-mentioned case, the patient was fortunate enough to have five incisors, one in excess of the regular number which made treatment planning easier since the other four incisors were of acceptable size, shape and anatomy. However, orthodontic treatment in this case will require the movement of one of the twinned incisors across the midline; this will drag the maxillary frenum across the midline. A discussion with the orthodontist revealed that pericision, frenectomy of the maxillary frenum and life-long retention would be required to maintain the orthodontically moved incisor in its new position in order to prevent relapse. If the patient only had four incisors and one of them was a macrodont then the options for modifying the tooth for aesthetic and functional reasons would include restorative modification, surgical sectioning or hemisectioning as discussed above. In either case, all options available should be carefully considered and weighed to provide the best treatment to the patient. In addition, if a patient has been noted to have a dental anomaly, a thorough analysis of the entire dentition may reveal other associated anomalies such as invaginations and supernumerary teeth or may be an associated dental finding in an individual with a disorder or syndrome.<sup>15,16</sup>

## Conclusion

Macrodontic incisors, although relatively infrequent in prevalence, may result in significant aesthetic and space considerations.<sup>2</sup> Hence, treatment planning of macrodontic incisors (caused as a result of fusion or gemination) may be quite complex and timely management while seeking intervention from a multi-disciplinary team is not only essential, but mandatory in order to prevent future complications.



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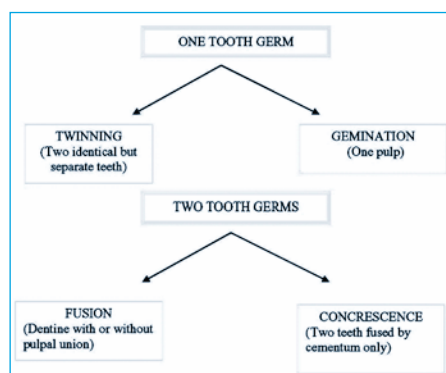


Diagram of Classification

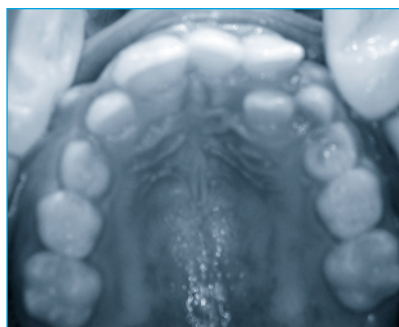


Figure 1 – Maxillary occlusal (mirror view) showing macrodont incisor 11, two central incisors on the left side and a palatally erupted 22

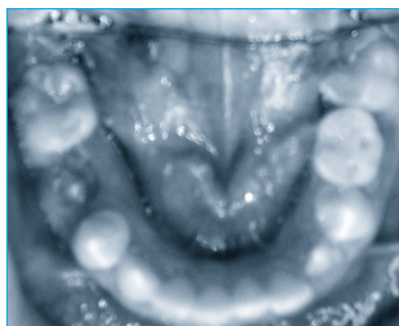


Figure 2 – Mandibular occlusal view

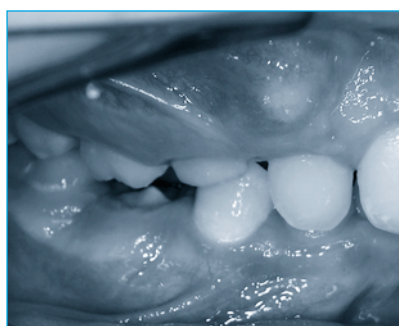


Figure 3 – Buccal view right side showing first permanent molars in Angle Class I relationship

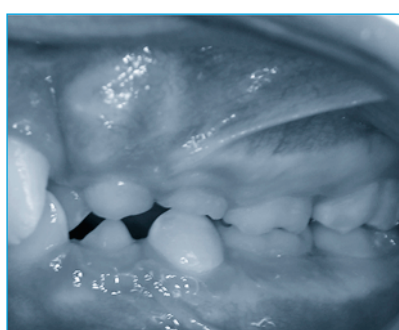


Figure 4 – Buccal view left side showing first permanent molars in Angle Class II relationship



Figure 5 – Labial view of macrodont 11 and supernumerary 21 and 21

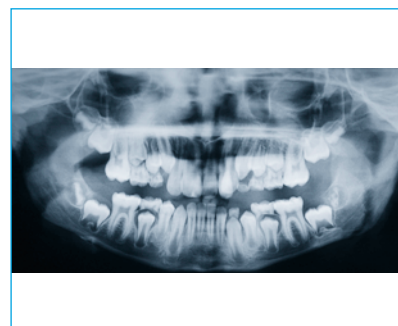


Figure 6 – Orthopantomogram taken prior to intra-oral photos showing erupted, unerupted and some primary teeth close to exfoliation. Note presence of 5 incisors in all



Figure 7 – Periapical radiograph of macrodont 11 showing a vertical groove associated with the crown of the tooth and one root and tooth 21

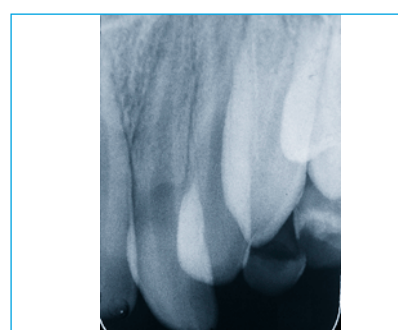
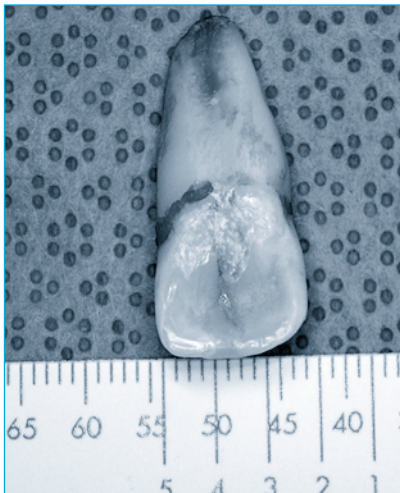


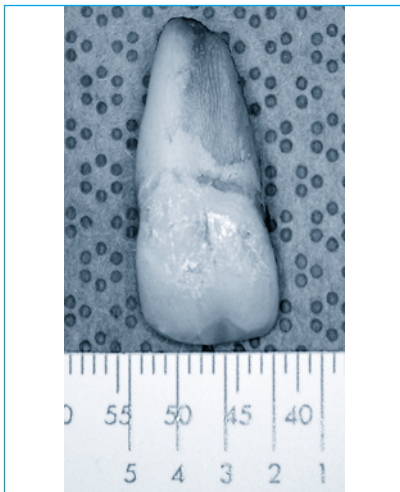
Figure 8 – Periapical view showing supplemental 21



*Figure 9 – Lateral cephalogram showing convex facial profile and anterior Class II division II malocclusion*



*Figure 10 – Palatal aspect of extracted macrodont showing vertical groove and composite restoration*



*Figure 11 – Labial aspect of extracted macrodont measuring 12 mm in mesio-distal width*

the Health Funds, and this is putting a squeeze on access to the facilities needed by dentists to carry out safe and effective dental treatment under general anaesthesia. Private hospitals perceive their dental lists to be unprofitable because the well-meaning 'No Gap' provisions governing Health Funds and Hospitals prevent the hospitals from charging dental patients the additional cost of long procedures.

Members of our organisation have informed me that some hospitals are charging them a facility fee for cases which exceed a threshold duration, usually of sixty or ninety minutes. Continued access to these hospital facilities by the affected dentists is dependent on them paying the hospital the facility fee, but keeping quiet about it! The facility fee must not be discussed, nor passed on to the patient in any recognisable form.

While the legality, and certainly the morality of these facility fees are questionable, it is probably better than the situation facing our members and other dentists in Melbourne. The recent closure of a major day surgery facility used by many dentists, has left dentists and their patients with nowhere to go!

While the logic of 'No Gap' policies is undeniable for those procedures actually covered by the Health Funds, it is perfectly reasonable for Hospitals to charge additional fees to cover procedures that are not covered by the funds! Given that our tax dollars are supporting the private health funds, the public (including our members) must demand a fair go here. Either the Health Funds should move to a time based rebate schedule for dental admissions along the lines of the recently introduced 'Relative Value' scheme for anaesthetists, or they should get out of the way of Hospitals charging patients a fair gap for longer

procedures to ensure that hospital doors remain open to dental patients and the dental profession.

The politicians who mandated general anaesthesia out of dental clinics and into hospitals, made a wise decision, but unfortunately did not follow through to fund the additional hospital beds required to meet the existing and growing demand for services. Dentistry is the third most common diagnostic group for hospital admission. As a profession, we should not be shy about demanding the services that are required for our patients. This not only includes affordable access to hospitals, but also the provision of appropriate theatre facilities and support for our patients such as radiographic facilities, and nasal intubation. To do less is to short change the very people we are trying to help. General anaesthesia has a legitimate and specific role in our clinical armamentarium. It is not just a deeper form of sedation!

In the absence of supply, demand remains. One of the most worrying sessions at the 2005 IAPD meeting in Sydney was on sedation. The speakers could be divided into those who were discussing sedation, and those who were doing general anaesthetics but calling them sedation, evidently to circumvent the requirement for an unaffordable or unavailable hospital admission to carry out treatment under general anaesthetic. These speakers described complex multi drug sedation in the dental surgery, with one using incremental propofol, fentanyl, and a laryngeal mask to 'protect the airway'. Sounds like an anaesthetic, doesn't it, but it was described as sedation.

*Is this just a 'rose' by another name?*

John Winters

<sup>1</sup> The Australian and New Zealand College of Anaesthetists (ANZCA) publish technical and professional standards for sedation and general anaesthesia. These documents are freely available from their web site at < <http://www.anzca.edu.au/>>. The ANZCA standards have also been incorporated into the AAPD Standards of Care in Paediatric Dentistry (see the Links section of our ANZSPD website).



# Home care self-applied fluoride products: current concepts for maximal effectiveness (part 2)

Laurence J Walsh

School of Dentistry, The University of Queensland

This article is the second in a two part series which discuss current concepts in the use of fluoride products.

At-home self-applied fluoride therapies comprise dentifrices (toothpastes), rinses, gels, and therapeutic oral care products to which fluoride has been added. Fluoride concentrations in various products vary from 200 or 220 ppm in daily NaF or APF rinses, to 400-550 ppm in child strength toothpaste, to 900 ppm in weekly fluoride mouthrinses, to 1000-1100 ppm in adult strength toothpastes, to 5,000 ppm in high strength toothpaste.

The primary action of these various therapies is to enrich the levels of fluoride in the intra-oral fluoride reservoir, which explains why the effects of these measures are additive to those of fluoride delivered through the reticulated water system. Fluoride delivered through toothpastes and rinses works primarily via topical mechanisms (inhibition of demineralisation, enhancement of remineralisation), whilst when used in gels and high-concentration toothpastes, the major mode of action is inhibition of bacterial enzymes.

For some time after eruption the enamel remains porous enough to absorb fluoride relatively easily, and throughout life, fluoride can be absorbed readily at any site where the enamel is porous. Not surprisingly, when the acidogenic activity of bacteria in dental plaque leads to demineralisation and increases the porosity of surface enamel, the uptake of fluoride is enhanced. If no additional acid is supplied the pH will rise and dissolve mineral not leached out will re-precipitate. In the presence of fluoride the precipitated apatite which contains fluor-apatite requires a lower pH (greater acid challenge) to dissolve it, and if this occurs it will provide further fluoride ions to again enhance re-precipitation.

This concept underpins the concept of 'low concentration, prolonged time' upon which common home care protocols are based. In the remineralisation process, saliva plays a

key role as a reservoir for ions such as calcium phosphate and fluoride. Low levels of fluoride in the saliva are achieved after use of a fluoride dentifrice or mouthrinse, although only for 2 hours rather than for several hours (in the case of fluoride gels) or days (in the case of fluoride varnish).

## Fluoride Mouthrinses

The effectiveness of rinsing with neutral sodium fluoride solution has been clearly demonstrated in supervised school based programs in children with moderate and high caries risk. Fluoride mouthrinsing programs have utilised two different strengths (0.05% for daily use, and 0.2% for weekly use), and have given an average caries reduction of approximately 30%. A major issue with fluoride mouthrinsing is compliance. In an assessment of compliance conducted by Geiger et al. (1992), only 13% of the 206 participants fully complied with the rinse protocol; 42% of the subjects used the rinse approximately every other day; and 45% used the rinse less frequently. Importantly, a significant dose response relationship was noted in which those who rinsed at least once every other day had fewer lesions (21%) than those who rinsed less frequently (49%).

Current recommendations are that fluoride mouthrinsing be used only when the individual's caries activity or risk justify it, and not as a universal measure. This is true whether or not the individual is also receiving the benefits of community water fluoridation.

Over-the-counter daily fluoride mouthrinses generally contain 0.05% NaF (200-220 ppm F). A 10 mL volume should be swished around the mouth vigorously once each day for one minute (ideally just before bedtime) and then expectorated. Patients should not rinse afterwards for 30 minutes. Pharmacy-only 'weekly' fluoride mouthrinses typically contain 0.2% NaF (900 ppm F). They are designed to be used under adult supervision, once

each week for one minute. Because children under six years of age and some disabled children may swallow a mouthrinse rather than spit it out, fluoride mouthrinses are not recommended for them. Providing that the quantities of fluoride rinse or other products given to older children and adults for home use are monitored carefully and are not excessive (e.g. 200 mL of rinse, or 30 mL of gel), and the rinse is spat out after use, the potential for toxic effects in these patients is minimal. Nevertheless, such products should be regarded as medicines and kept out of reach of young children.

In patients considered to lie above the risk threshold, frequent exposure to low dose fluoride mouthrinses which provide readily available fluoride ions able to consolidate the remineralisation of enamel is a useful strategy. Patients in this group would include those having fixed orthodontic treatment, where enamel demineralisation is a common occurrence. This boosting of salivary fluoride levels is best achieved with mouthrinses used at a time of day other than immediately after toothbrushing, although high fluoride dentifrices could also be considered if a chemical plaque control was also desirable or necessary at the same time.

The author prefers neutral NaF rinses to APF rinses for at-home use because the low pH (~2-3) and high titratable acidity of APF rinses can contribute to erosive damage of glass ionomer restorations and the glass-based fillers in composite resin, as well as the loss of glaze of porcelain restorations, if such rinses are used on a daily basis.

## Low concentration fluoride dentifrices for children

In fluoridated communities, the use of a fluoride-containing dentifrice from the time the teeth erupt (approximately 6 months of age) to the age of 17 months is contra-indicated because ingestion may increase the risk of mild fluorosis. In non-fluoridated areas, the lack of exposure to optimally fluoridated water

poses a different situation in which the use of a low fluoride (child strength) dentifrice may be indicated according to the perceived level of caries risk, as gauged by a dental professional.

From the age of 18 months to 5 years (inclusive), children in both fluoridated and non-fluoridated communities should use a low fluoride (400-550 ppm) dentifrice. Only a small (pea-sized) amount should be used, and the child should be supervised while brushing to avoid them using or ingesting excessive amounts of dentifrice. After brushing they should expectorate as much as possible but not rinse or swallow.

### Normal concentration fluoride dentifrices

Fluoride formulations in conventional dentifrices may be NaF, mono-fluorophosphate (MFP), or stannous fluoride; all have similar cariostatic effects. When fluoride dentifrices usually are used regularly two or three times a day, they provide a frequent source of fluoride in low concentrations that can inhibit demineralisation and enhance remineralisation. Fluoride dentifrices constitute greater than 90% of the overall Australian toothpaste market. Normal usage in tooth brushing with a conventional fluoride dentifrice will reduce the incidence of dental caries by some 20-25%. Conventional fluoride dentifrices are considered responsible for low caries incidence in children in many Western countries in recent decades.

Fluoride dentifrices are recommended for patients of all ages, whether or not they live in fluoridated or non-fluoridated areas. One brushing should be done just before bedtime, so that fluoride is present in the intra-oral reservoir prior to a period of low resting salivary flow, thus prolonging its availability. Thus, dentifrices with a fluoride concentration from 1,000-1,100 ppm are suitable for normal twice-daily use in all individuals from 6 years of age. After brushing, patients should expectorate, but not rinse or swallow.

### High fluoride dentifrices

As noted in the first article in this series, fluoride at a level of 5,500 ppm has considerable properties as an antibacterial agent, and thus

providing this level in a dentifrice is ideal for high caries risk teenagers and adults since compliance is achieved easily and there is a very favourable benefit/cost ratio. These products are not indicated for use in children. They should be used in place of a conventional dentifrice at bedtime.

After brushing, patients should expectorate, but not rinse or swallow. They should then refrain from eating or drinking for at least 30 minutes.

When used on a daily basis, high fluoride toothpastes are a valuable component of the preventive program for a high caries risk teenager or adult. Their ease of use is a major positive factor, particularly in elderly patients whose dexterity may be impaired. The use of dentifrices containing 5,000 ppm fluoride has been shown to be effective for arresting incipient and leathery root surface caries lesions, when used over a 6 month period.

### Fluoride gels

The mechanisms of action of these products were discussed in the first part of this series. Home use of gels (5,000-9,000 ppm) may be indicated in adult patients at high risk of dental caries or dental erosion because of salivary dysfunction, where it would normally be used in combination with other measures designed to enhance remineralisation, elevate salivary pH, and provide symptomatic relief of symptoms of oral dryness. Its home use is contra-indicated in children.

Patients with periodontal attachment loss or sensitive cervical dentine may gain significant benefit from frequent application of a stannous fluoride gel following toothbrushing with a conventional dentifrice. Products of this type, such as Colgate Gel-Kam, contain 1,000 ppm fluoride with 3,000 ppm stannous ion, the latter being responsible for a level of anti-bacterial activity. Some stannous fluoride products contain citric acid as a flavouring agent which presents a potential risk for erosion of dentine if the patient's salivary parameters are compromised and the gel is used on a daily basis. Stannous fluoride gels are suitable for use in teenagers and adults, and can be used once daily for an anti-plaque action, or twice daily for a desensitising action. Like other fluoride gels, they are not a substitute for brushing, and are used after

completing normal toothbrushing. For maximum benefit, stannous fluoride gel should be left on for 60 seconds, then expectorated. There should be no eating or drinking for 30 minutes afterwards.

Fluoride gels are normally applied at home on a separate (dry) toothbrush (after normal mechanical oral hygiene has been completed). It is not normally necessary to fabricate special trays for home fluoride gel treatment. Trays used for home vital bleaching materials can be used if a more sustained contact time is desired. Customised (vacuum formed) soft trays with 4 or 5 drops of NaF neutral gel are particularly useful for patients undergoing head and neck radiation treatment, bone marrow transplantation, anti-neoplastic chemo-therapy, or who suffer from the more severe forms of xerostomia, since they allow greater application time to be achieved in areas of high caries risk, such as proximal surfaces and cervical surfaces.

As a combined preventive and therapeutic agent, self-applied fluoride gels will best benefit patients with high caries activity, salivary flow problems caused by drugs or radiation therapy, Sjögren's syndrome, root surface caries, dentinal hypersensitivity, over-dentures and recurrent caries around the margins of existing restorations. The trays are made from sheets of 0.5 mm thick clear plastic that are vacuum molded to study models. The boundaries of the trays should extend past the gingival margin by about 1.5 to 2.0 mm. Neutral NaF gel (5,000 or 9,000 ppm F) is placed in the tray for 4 minutes, at night immediately before retiring. When done, the excess should be expectorated. There should be no eating or drinking for 30 minutes afterwards.

### Suggested further reading:

- ARCPH. The use of fluoride in Australia: Guidelines. Aust Dent J 2006; 51(2): in press.
- Featherstone JD. Prevention and reversal of dental caries: role of low level fluoride. Community Dent Oral Epidemiol. 1999; 27(1):31-40.
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- Ripa LW. Rinses for the control of dental caries. Int Dent J. 1992; 42(4 Suppl 1): 263-269.
- Geiger AM, Gorelick L, Gwinnett AJ, Benson BJ. Reducing white spot lesions in orthodontic populations with fluoride rinsing. Am J Orthod Dentofacial Orthop. 1992; 101(5): 403-407.



- Monsour PA, Kruger BJ. The use of fluoride preparations in dental practice. Aust Dent J. 1985; 30(2):81-85.
- Petersson LG. Fluoride mouthrinses and fluoride varnishes. Caries Res 1993; 27 (Suppl 1):35-42.
- Eakle WS, Featherstone JD, Weintraub JA, Shain SG, Gansky SA. Salivary fluoride levels following application of fluoride varnish or fluoride rinse. Community Dent Oral Epidemiol. 2004; 32(6):462-469.
- Walsh LJ. Preventive dentistry for the general dental practitioner. Aust Dent J 2000; 45(2):76-82.
- Walsh LJ. Fifteen strategies for caries prevention: Towards target zero. ADA News Bulletin 2000; 279:5-8.
- Baysan A, Lynch E, Ellwood R, Davies R, Petersson L, Borsboom P. Reversal of primary root caries using dentifrices containing 5,000 and 1,100 ppm fluoride. Caries Res 2001; 35:41-46.
- Lynch E, Baysan A, Ellwood R, Davies R, Petersson L, Borsboom P. Reversal of primary root caries using dentifrices containing 5,000 and 1,100 ppm fluoride - 3 month follow-up. Amer J Dent 2000; 13:218-221.
- Whitford GM. The metabolism and toxicity of fluoride. Monogr Oral Sci. 1996; 16:1-153.
- Newbrun E. Topical fluorides in caries prevention and management: a North American perspective. J Dent Educ. 2001; 65(10):1078-1083.

## ANZSPD (Vic Branch) Paediatric Oral Health Small Grants

Applications are invited from interested individuals, groups, institutions or organisations for funding for small projects or items of equipment that will promote the oral health of children.

Requests in writing should be made to the President, ANZSPD (Vic Branch) for funding of between \$500 and \$5000. The application should be no longer than one page including a clear aim, expected outcomes and how they meet the objectives of ANZSPD (Vic Branch) which are:

1. To study and promote the improved dental health of children;
2. To bring together individuals and entities from the various disciplines associated with paediatric dentistry for the purpose of furthering the objective above;
3. To provide opportunity for discussion of clinical methods and research based on the team approach.

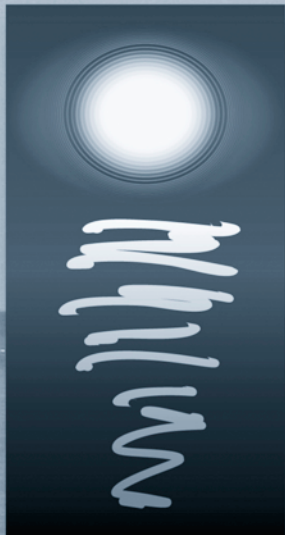
Applications should be sent in hard copy to: Dr Jodie Heap, Secretary ANZSPD (Vic Branch), PO Box 390, Clifton Hill 3068.

Applications will be considered by the ANZSPD (Vic Branch) whose decision will be final and no correspondence will be entered in to regarding the outcome of applications.

Successful applicants will be expected to provide a report on the outcomes of their application for publication in Synopses.

Closing date for applications: 30th November 2006

Announcement of successful applicants: ANZSPD evening meeting on 8th February 2007.



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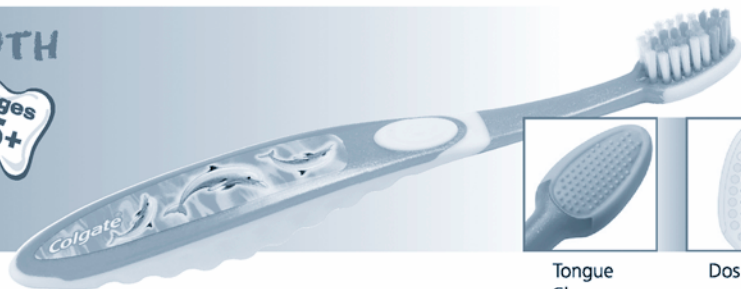
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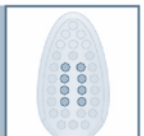


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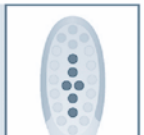


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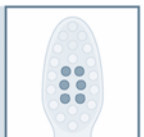
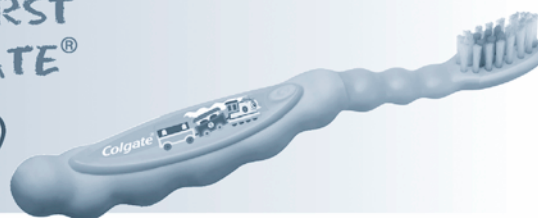


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**Dr PJW VERCO**  
PEDODONTIST

B.D.S (Adel.), B.Sc.Dent. (Hons), M.D.S., F.A.A.P.D., F.P.F.A

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10 JUL 2006

BY:.....*SL*.....

**Wednesday, 5 July 2006**

**Dr Karen Kan**  
**The Editor, Synopses**  
**138 Harp Road**  
**East Kew Victoria 3102**

**Dear Karen,**

The 8<sup>th</sup> Congress of the European Academy of Paediatric Dentistry was held in Amsterdam, The Netherlands 8<sup>th</sup> – 11<sup>th</sup> June 2006.

The following registrants attended from Australia:

Dr Eduardo Alcaino  
Dr Athnony Burges  
Dr Angus Cameron  
Dr Mark Foster  
Dr Roger Hall OAM  
Dr David Manton  
Dr Louise Brearley- Messer  
Dr Nita Pai  
Dr Juliette Scott  
Dr Soni Stephen and  
Dr Joe Verco

Australia was well represented in speakers and presentations the following Professionals presented as follows:

**PROMOTING REMINERALIZATION: USING CASEIN PHOSPHOPEPTIDE  
– STABILIZED AMORPHOUS CALCIUM (FLUORIDE) PHOSPHATE.  
A CHEMICAL APPROACH 1**

*D.J. Manton*

**CASE REPORT: MANAGEMENT OF ORAL MANIFESTATIONS IN  
PAEDIATRIC PATIENTS WITH SARCOIDOSIS AND ADRENAL  
INSUFFICIENCY.**

*S. Stephen, M. Tjeuw*

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**Dr PJW VERCO**  
PEDODONTIST

B.D.S (Adel.), B.Sc.Dent. (Hons), M.D.S., F.A.A.P.D., F.P.F.A

**HYPOPHOSPHATASIA PRESENTING WITH ONLY DENTAL  
MANIFESTATIONS.**

*A.C. Cameron, A.M.E. Sanares, C.H.L. Cheong, N.M King*

**ARGON BEAM ELECTROSURGERY FOR TONGUE TIES AND  
FRENECTOMIES IN INFANTS.**

*P.J.W Verco*

**THE HAZARDS ORAL PIERCING**

*M.G. Foster*

The 9<sup>th</sup> Congress of the European Academy of Paediatric Dentistry will be held  
May 29<sup>th</sup> – 1<sup>st</sup> June 2008 in Dubrovnik, Croatia.

**With Kind Regards,**

  
**PJW Verco**

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All Appointments P - +61 8 8267 4081 F - +61 8 8267 4976 E - [surgery@northadelaide.com.au](mailto:surgery@northadelaide.com.au) KAN 5.7.06.doc



## ANZSPD Federal Secretary – Manager's report

The Federal Council of the Society met in Dunedin, New Zealand on the 6th July 2006.

From that meeting:

One of the principal matters considered was that of the favourable financial position in which the Society now finds itself. One of the main reasons for this was the decision taken by the Society in 2000 to increase the federal subscriptions for members. The idea was to shore up the financial position of the Society ahead of the I.A.P.D. Congress held in Sydney in November 2005. This process was assisted by two very well attended and hence financially successful Federal Conventions (in Brisbane in 2002 and in Melbourne in 2004). Of course, the absolute success of the Sydney I.A.P.D. Congress is now historical fact, and that financial buttress established by Society remains. The Federal Council had sought guidance from the branches on how best to use these funds, and all of these were presented at the meeting. With so many worthy ideas, it was decided to establish an expert sub-committee to present a report for the Council. This sub-committee is about to be convened and it is hoped it will be able to report to the Council by the time of the next Federal Council meeting in Broome in May 2007. Two themes did recur in a lot of the submissions – firstly, the support of research in paediatric dentistry and secondly, support and sponsorship of paediatric dentistry teaching and programmes in Third World countries in our region.

Federal Council meetings devote a good deal of time to the programme of meetings, and the Dunedin meeting was no exception. In the pipeline (at that time) were the New Zealand Branch meeting to be held before the N.Z.D.A. Congress in Auckland in September 2006; the Federal President, Dr John Winters and Dr Kathy Harley will be speaking at this meeting. In March 2007, the A.D.A. Congress will be held, but because of the 15th A.N.Z.S.P.D. Convention in Broome just two months after this, there will be a minimal paediatric dental component at the A.D.A. Congress. The next R. K. Hall International Visiting Lecturer

Tour will be held in 2008, probably in March of that year, with the Tour visiting New Zealand, Victoria and New South Wales. The next Federal A.N.Z.S.P.D. Convention, the 16th, will be in New Zealand. By the Constitution, it must be held between May 2009 and May 2010. The New Zealand Branch will conduct this Convention on behalf of the Society – two possible locations are being considered, Rotorua and the Bay of Islands.

Members will be aware of the logo, 'ANZI' adopted by the organizing committee of the Sydney I.A.P.D. Congress. Since then, the Society has acquired the copyright for the logo and has now registered 'ANZI' as a Trade Mark. This allows the use of the logo in Classes 41 and 42. Services in Class 41 are education and entertainment services related to dentistry; the organisation of conferences and events. Services in Class 42 are dental services; services provided by an organisation to its members. Federal Council has decided to delegate control of the use of the logo to the Branches for use however they see fit; that it was permissible for individual members to use the logo in an acceptable manner to indicate their membership of A.N.Z.S.P.D. provided that individual remained an active A.N.Z.S.P.D. member. Branches or members wanting access to a high resolution electronic version of the logo should contact me by email: [devlins@iinet.net.au](mailto:devlins@iinet.net.au)

Another item was one regarding the use in Australia of operating theatres in private hospitals for dental cases. In a number of states, problems have arisen with the patients who are privately insured with the level of rebate they are obtaining. This rebate doesn't take into consideration the time taken for many of the dental cases, nor the degree of difficulty of the cases in question. As a result, some private hospitals have decided to limit or even withdraw visiting rights to their hospitals for some dentists. This has had a large impact on many paediatric dentists, with the problem being especially noticeable in Victoria. The Federal President, Dr John Winters will be approaching the Federal A.D.A. to discuss the matter.

Once again, mainly for Australian members, the A.D.A. is planning to review their 'Schedule of Services' with a view to producing a 9th Schedule in 2007. The Schedule Committee of the A.D.A. has invited submissions. If any

members or Branches have anything they would like considered by this A.D.A. Committee, they should forward it to me, once again by email to [devlins@iinet.net.au](mailto:devlins@iinet.net.au) by 15th December 2006.

Alistair Devlin

## ANZSPD – Branch news 2006

### Queensland

The Queensland branch has continued its roughly bimonthly meetings. Our last meeting, in May, was held at the new venue of ADA Christensen House, in Bowen Hills. At this meeting, Prof Laurie Walsh outlined some future trends in 'New Technologies in Children's Dentistry'. In this very informative lecture, he described new methods of plaque testing and pH testing, and the use of ozone for oxygen based destruction.

Our meeting scheduled for 22 August at the same venue will include a lecture by Prof Newell Johnson, which promises to be just as interesting.

Our Weekend Away for 2006 will be held at Sea World Nara Resort, from 25-26 November. Our speakers for the weekend are Prof. Saso Ivanovski, Dr Camile Farah and Dr Daniel Ford. The programme will be centred around oral pathology in children. Prof. Ivanovski and Dr Farah will be focussing on soft tissue pathology, concentrating on issues relating to plaque and non-plaque related gingival diseases including etiology, management and systemic correlations. Dr Ford will be outlining current research and practice relating to the diagnosis and management of enamel hypoplasia in children.

For further information regarding our meetings or the weekend away, please contact Dr Steven Kazoullis, at [steven@kazoullis.com](mailto:steven@kazoullis.com).

Steven Kazoullis



## Western Australia

The Western Australian Branch has held another successful Mid Winter Meeting. Once again, the venue was the Bunker Bay Resort in the south west of the state. This Resort is located quite close to Cape Naturaliste, which is one of the two capes on this south west corner, the other being Cape Leeuwin. A full day programme was kicked off by Dr Marc Tennant. Marc, among other things, has headed the Centre for Rural and Remote Oral Health at the University of Western Australia. This has given him a unique opportunity to look at the oral health of those living away from the major population centres of WA, to document the state of their oral health and from that, to devise ways of improving this aspect of their health. It is well recognised that oral health suffers in the same way as the general health of these people and Marc was able to present some of this information; he also provided a concise update on the role and action of fluoride and other caries controlling methods.

Marc then wound up his presentation with the possible practical applications of this latest knowledge, especially as it applies to the communities with which he has been dealing. Marc will be one of the presenters on the programme of the Broome A.N.Z.S.P.D. Convention in May 2007. It will be a session well worth hearing, especially as Broome is right on the doorstep of the area about which he will speak.

The rest of the programme was given over to the tried and tested *Pot Pourri* format which has been a feature of these Mid Winter meetings for many years. A wide range of clinical cases of interest were presented by members Mark Foster, Vanessa William, Peter Gregory, Peter Readman, Boyen Huang and Trudy Stewart, and then the day was wrapped up by Oral and Maxillofacial Surgeon, Evan Kakulus. Evan gave two case reports, one of Fibrous Dysplasia and the other of venous malformations, both in adolescents. Once again, the widely varied presentations engendered much semi formal discussion, something which this meeting format promotes.

The day was wound up with a dinner at the nearby Wises Winery Restaurant. As this is in the Margaret River Wine Region, this was a most suitable way to conclude a very successful day. The Branch is indebted to Peter Readman and Carmel Lloyd for their organising of the meeting and dinner.

The final meeting of the year will be the Annual General Meeting of the Branch. This will be on 15th December, when the Guest of Honour will be Dr Sally Hibbert from Sydney. She, being the sporting tragic that she is, will be in Perth to watch a certain cricket Test Match which is of some apparent interest to her!

Alistair Devlin

## New Zealand

This year, we have been concentrating on raising the profile of Paediatric Dentistry in New Zealand. Recently in June, the NZ branch was busy hosting Dr Tim Johnston's tour around New Zealand. What started out being a two city itinerary, ended up with six locations visited as requests came from other smaller centres wanting the opportunity to hear Tim. As usual with Tim's super flexibility and relaxed nature he was happy to accommodate the requests. The feedback received was very positive and an excellent range of material was covered, which benefited both dentists and therapists.

We are also hosting a pre-conference course prior to the NZDA biennial conference on September 6th with the theme being 'Managing Dental Anomalies – a lifetime perspective'. This is a limited number course to provide an opportunity to have detailed discussions with the presenters. Dr Kathy Harley and Dr John Winter are the presenters for this day. We look forward to having them both visit Auckland.

Other news from our members

Callum has been away in Cambodia doing his wonderful work and is keen to have any interested members give him a hand. This sounds like a great opportunity to really help make a difference in a third world country and do some sightseeing. Contact Callum directly if interested:  
c.durward@clear.net.nz

It's great to have our lovely Erin Mahoney back home again in NZ, we wish her all the best in Wellington.

The winter has been fairly mild here with some great snow – so come and visit!

That's all from the 'Mainland' folks!

Nina Vasan

# Registration of Interest Volunteers for 2007 Clinic to be held In Kharikhola Khumbu Nepal from April 1 to April 30 2007

## Introduction

The Bandaaid Box project was initiated in 2004 to assist the impoverished villagers in the remote village of Kharikhola. With the generosity of the Taranaki community, a large quantity of donated medical supplies and funds enabled a Nepalese doctor and three New Zealand volunteers to treat 1300 villagers; the first time direct medical help had been available in this area.

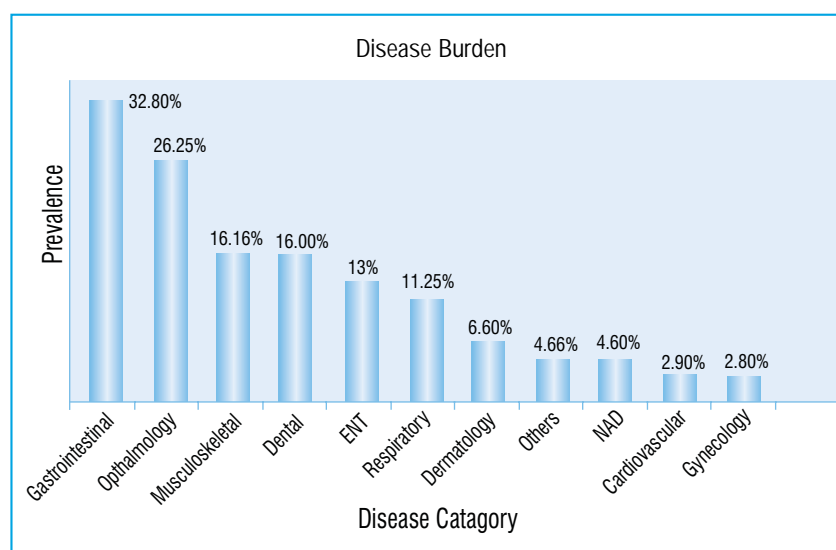
A second health clinic was held in 2006 with a larger more diverse team of 12 volunteers who along with two Nepalese doctors and a dentist treated 2400 patients over a 14 day period.

Planning is now well under way for a further clinic to take place in April 2007. The Bandaaid Box Trust is seeking registrations of interest in a variety of fields from people willing to sacrifice a month of their time and talents to assist this project. *As a matter of policy for the Trust all volunteers need to meet their personal trip cost which is estimated to be \$5500.*

## Skills Required

- General nursing, triage, first aid, wound dressing and bandaging
- Medical, obstetrics, ENT, anesthesia
- Pharmacy operation and records
- Optical optometrist, ophthalmologist
- Dental
- Health education
- Surgical

## Range of conditions treated in 2006



## Key Conditions treated

- Gastrointestinal: APD, Worms, Diarrhea/dysentery
- Ophthalmology: 630 treated with refractive errors, cataract, episcleritis, dacrocystis / conjunctivitis, ectropian / entropion
- Musculoskeletal: Aches and pains, deformities and old fractures
- ENT: pharyngitis/rhinitis, CSOM, Wax, chronic sinusitis
- Respiratory: COPD, URI
- Dermatology: Dermatitis, impetigo, wound/ulcer, tenia, pityriasis versicolor scabies, sebaceous cyst

## Focus for 2007

- Maintain medical, optical, dental and pharmacy and triage services
- Negotiating to secure a Nepali Ophthalmic surgery team for cataract and related conditions
- Planning an in depth assessment into gynecological conditions to assess the need for surgical procedures in the future
- Providing medical materials and

equipment, knitted toys and clothes, vegetable seeds and other materials to transport with volunteers to Nepal

- Seeking sponsorship to fund the ophthalmic surgery programme

## What to expect for a clinic Nepali style

Are you prepared to:

- Take a short flight to Paphlu?
- Trek for three days through the Nepal countryside to get to the clinic?
- Be accommodated in relatively spartan accommodation on a shared room basis?
- Live with very limited hot water for ablutions and very basic toilet facilities?
- Cope with a different diet? (Meals provided by an excellent Nepali cook team.)
- Apply the New Zealand number 8 wire mantra to issues that arise? Adaptability is the key attribute! The ability to make do with less than ideal conditions is essential.

- Improvise and deal with any situation that arises?
- Put your hand up for non-professional duties around the clinic?
- Deal with scalp livestock and unwashed children? Or be able to work in an ICU situation? And everything in between!
- Adapt to an unreliable power supply?
- Pitch in wherever as required?

If so, you are the person for our team

You will make an incredible difference to the lives of the villagers

AND YOU WILL HAVE AN INCREDIBLY ENRICHING EXPERIENCE

It's not all hard slog. Also provided in the programme for the group will be:

- Accommodation in Manaslu Hotel close to downtown Kathmandu
- A full day sightseeing tour with expert guide
- A short post clinic trek to Everest National Park staying in Namche Bazaar
- The Everest Scenic Flight
- Time to shop in Kathmandu

### Registration of Interest

If you are interesting in assisting the Bandaaid Box Team in 2007 would you please complete the attached form and return it to me by post or email.

In the next few weeks we will be pegging down final dates for travel and finalising costs.

I look forward to hearing from you

*Sincerely*

*Robin Drake Trustee*

## Volunteer Registration of Interest

### Bandaaid Box Clinic Kharikhola Nepal

26 March to 20 April 2007

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone (h): \_\_\_\_\_

Telephone (w): \_\_\_\_\_

Mobile: \_\_\_\_\_

Email: \_\_\_\_\_

Profession: \_\_\_\_\_

Current employment: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### Other information

*Curriculum Vitae:* please attach your current CV and practicing details.

*Evidence of relevant experience:* please attach details.

*Documents required for the Nepal Ministry of Health:*

- Copy of relevant qualification
- Copy of current practicing certificate / licence.

*Physical Fitness:* In the course of the programme there will be a number of days trekking across the Nepal countryside little of which is flat. A good standard of fitness is required both to deal with some rather steep climbs involved and altitude. Please advise:

- Any health condition that might affect you.
- If you have had any trekking or hiking experience.

*Robin Drake*

*Trustee*



# Colgate®

## The **NeutraFluor**® Family

Protecting your moderate to high risk caries patients

### Colgate NeutraFluor 220 Daily Mouth Rinse

- ✓ For moderate risk caries patients
- ✓ Useful during orthodontic treatment

### Colgate NeutraFluor Tablets

- ✓ Formulated for patients who live in areas with non-fluoridated water
- ✓ Chewable tablets

### Colgate NeutraFluor 9000 Fluoride Topical Gel

- ✓ For moderate to high risk caries patients
- ✓ Push-pull cap for easy tray application

### Colgate NeutraFluor 900 Weekly Mouth Rinse

- ✓ For moderate to high risk caries patients
- ✓ Up to 55% caries reduction with weekly use<sup>1</sup>

<sup>1</sup> WS Driscall et al, JADA, 1982; 105, 1010-13.

### Colgate NeutraFluor 5000 Plus

- ✓ For moderate to high risk caries patients where compliance may be of concern
- ✓ Used daily in place of other toothpastes

### Colgate NeutraFluor Gel

- ✓ For high risk caries patients
- ✓ Contains no SLS or abrasives



BC06KG018

Image of NeutraFluor Gel is computer generated and not photograph of actual packaging

For more information, contact the Colgate Call Centre 1800 262 111  
Colgate-Palmolive Pty Ltd, 345 George Street, Sydney NSW 2000

# Colgate® Corner

by Barbara Shearer  
Colgate Professional  
Relations Manager



## Colgate Oral Health Month

August was our best Oral Health Month ever! With the support of the Australian Dental Association as well as many individual dental professionals, the importance of oral health was promoted across Australia. There were numerous press releases about Oral Health during the month as well as television advertising, in-store and in-surgery promotions. The competition to win \$10,000 towards your Dental Health was extremely popular. The winners will be announced soon. Many dentists and hygienists took the opportunity to promote the 4-Steps (Brush, Floss, Rinse and Visit Your Dentist) within their practices, local schools and preschools and communities. The Bright Smiles Bright Futures kits were in very high demand, as were requests for our Dr Rabbit suits!

## IADR Brisbane

I hope that many of you had the opportunity to attend the IADR (International Association for Dental Research) General Session held in Brisbane 28 June – 1 July. Over 3600 delegates attended the meeting, with over 85% coming from outside the Pacific Region. Colgate was proud to be a sponsor of this meeting and to work with the Australasian Division of the IADR to bring the Science Transfer Program to local dental professionals. Colgate sponsored symposia on Geriatric dentistry and Systemic Health utilising the experts who were visiting Brisbane for the IADR. Colgate also sponsored the inaugural PAF reception. It was great to see the quality and quantity of dental research in our region.

## ANZSPD 15th Biennial Convention, Broome 22-25 May 2007

Colgate is pleased to confirm our principal sponsorship for the ANZSPD 15th Biennial Convention, 'Stairways to the Moon', Rising Expectations in Paediatric Dentistry. Your organising committee is working hard to produce a memorable scientific and social programme, in a fantastic location.

## An Alternative to Chocolate – Bright Smiles Fundraiser

With growing levels of obesity in Australia's children, combined with increased levels of tooth decay, the Colgate Bright Smiles Bright Future team has been inspired to provide a healthy alternative to fundraising within schools. We have had several small scale trials during the year, where schools were able to sell Colgate Toothbrush/toothpaste packs to friends and families within their communities. Incentives were given for the schools and classes that sold the most packs. All profits were retained by the schools and used for new resources or projects. In 2007 the fundraiser will be rolled out nationally. Why not encourage your children's school to include this in their fundraising activities? For more information contact Colgate's call centre on 1800 075 685.



# Colgate® Sales Team

### New South Wales

Nolene Devery Sales Manager	
for NSW/Qld	0419 998 515
Tanya Brown	0410 488 581
Louise McAllister	0419 993 700

### Australian Capital Territory

Deborah Goodwin	0419 268 549
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### Queensland

Hilary Berry	0417 642 665
Anna Bagnell	0409 159 417

### Sales Manager for Vic/Tas/SA/WA/NT

Janine Vincent	0417 592 499
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### Victoria

Catherine Byriell	0417 598 170
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### SA/NT

Leanne Nelson	0400 387 249
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### New Zealand

Glenda McKenzie	0212 458 190
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In Australia, orders for Colgate products are placed through:

Halas Dental  
Phone: 1300 658822  
Fax: 1300 658810

In New Zealand, orders for Colgate products are placed through:

Shalfoon Dental  
Phone: 0800 808 855  
Fax: (09) 3781 158

Colgate Territory Managers are here to assist you with the products you need in your surgeries.

Contact details:  
Barbara Shearer  
Professional Relations Manager  
barbara\_shearer@colpal.com  
Office: (02) 9229 5798

## Coming events

24 November 2006

The medically compromised paediatric patient and dental management

ANZSPD SA Branch  
Next Generation, Memorial Drive  
Adelaide, South Australia

25 November 2006

Happy Smiles, Happy Children:  
The Prevention and Management of  
Common Dental Diseases

ANZSPD VIC Branch  
Suma Park Homestead and Conference Centre  
Bellarine Highway  
Queenscliff, Victoria

23-27 May 2007

ANZSPD Federal Convention

Cable Beach Club Resort  
Broome, Western Australia

24-28 May 2007

60th AAPD Annual Session

Henry B. Gonzalez Convention Center  
San Antonio, Texas, USA

14-17 June 2007

21st IAPD International Congress

Hong Kong Convention and Exhibition Centre  
<http://www.iapd2007.com/>

8-13 June 2009

22nd IAPD International Congress

International Congress Centre  
Munich, Germany

## Austalian and New Zealand Society of Paediatric Dentistry

[www.anzspd.org.au](http://www.anzspd.org.au)

### Federal President

Dr John Winters  
Chairman, Dental Department  
Princess Margaret Hospital  
Roberts Road  
Subiaco WA 6008  
email: [john.winters@kidsdentist.com.au](mailto:john.winters@kidsdentist.com.au)

### Federal Secretary Manager

Dr Alistair Devlin  
57 Burroughs Road  
KARRINYUP WA 6018

### Branch Executives

Branch	President	Secretary	Federal Councillor
NSW	Dr Sally Hibbert	Dr Philippa Sawyer <a href="mailto:philippa.sawyer@toothdoctor.net.au">philippa.sawyer@toothdoctor.net.au</a>	Dr Kareen Mekertichian
Qld	Dr Robin Smith	Dr Steve Kazoullis <a href="mailto:steven@kazoullis.com">steven@kazoullis.com</a>	Dr John Rutar
SA	Dr Sam Gue <a href="mailto:sumantgue@yahoo.com">sumantgue@yahoo.com</a>	Dr Mary Apps	Dr Sam Gue
TAS	Dr Tasha Dodd <a href="mailto:aphcrane@netspace.net.au">aphcrane@netspace.net.au</a>	Dr Wayne Ottaway	Dr Tasha Dodd
VIC	Dr Nicky Kilpatrick	Dr Jodie Heap <a href="mailto:jlheap@bigpond.net.au">jlheap@bigpond.net.au</a>	Dr John Sheahan
WA	Dr Tim Johnston	Dr Alistair Devlin <a href="mailto:devlins@inet.net.au">devlins@inet.net.au</a>	Dr John Winters
NZ	Dr Nina Vasan	Dr Mary Anne Costelloe <a href="mailto:maryannecos@xtra.co.nz">maryannecos@xtra.co.nz</a>	Dr Nina Vasan

### Editor Synopses

Dr Karen Kan

### Correspondence

Karen Kan  
The Editor, Synopses  
138 Harp Road  
Kew VIC 3101  
AUSTRALIA

### Printing and distribution

**Colgate®**

Colgate Oral Care  
Level 15, 345 George Street  
Sydney NSW 2000  
AUSTRALIA

### Mailing List

The mailing list for the distribution of Synopses is maintained by Dr John Winters on behalf of the Federal Secretary/Manager of ANZSPD. It is compiled from information supplied by the Branch Secretaries. If there are errors in your mailing details, please contact Dr John Winters or your Branch Secretary. DO NOT contact Colgate for address correction.

### Submissions

All text for inclusion in Synopses must be submitted to the editor on floppy disk, zip disk, CD, or by email. Both PC and Mac formats are accepted. Media will not be returned. Address email to [karenkan@optusnet.com.au](mailto:karenkan@optusnet.com.au). Please enclose your contact details and email address with all submissions.

Deadline next issue

January 2007